

ACTUATOR CAPABLE OF REVOLVING

ABSTRACT OF THE DISCLOSURE

A revolution type actuator having a movable member performing a revolution motion includes a movable member capable of revolving with respect to a fixed member, a plurality of conducting paths which are provided on a face parallel to a trajectory face of the above-mentioned revolution motion and through which currents flow in mutually intersecting directions, power supply which flows currents having different phases through the above-mentioned plurality of conducting paths, and a magnetic field generator which forms a magnetic field perpendicular to the above-mentioned conducting path, in which the above-mentioned movable member revolves due to an electromagnetic force generated by an interaction between a current flowing through said conducting path and a magnetic field generated by the above-mentioned magnetic field generator. By this configuration, it is possible to obtain a revolution motion directly as an output without using an output transforming mechanism and also accommodate a high-speed rotation because in principle there is no variation in the magnetic gap between the movable element and the fixed element.